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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PEACHES, RANDY

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/986,698	<b>Applicant(s)</b> ZHANG, JUNBIAO	
	<b>Examiner</b> RANDY PEACHES	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14-23 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-12, 14-23 and 25-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments with respect to **claims 1, 3-12, 14-23 and 25-32** have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1, 3-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Erikson (U.S. Patent Number 6,622,018 B1) in view of Leon (U.S. Patent Number 6,680,923 B1).

Regarding **claim 1**, Erikson discloses a method for extending a capability of a portable computer system (PCS, 100), which reads on claimed "handheld device," capable of independent operation, the method comprising:

- detecting a remote device (RD, 610, 620, 630), which reads on claimed "helper device," , see FIGURE 6, that provides a resource, i.e. television, stereo, etc.

See column 1 lines 25-30;

- said PCS (100) requesting access to the selected resource from said RD (610, 620, 630). See column 8 lines 50-55;
- transferring data to said RD (610, 620, 630) from said PCS (100) in accordance with said RD (610, 620, 630) if the said PCS (100) grants access to the selected resource. See column 9 lines 25-40 and column 10 lines 1-10;
- using the selected resource to process the transferred data (see column 2 lines 31-40) transferred from the said PCS to the said RD;
  - wherein the resource is not adequately provided by the independent operation of said PCS (100). See column 2 lines 17-31, and

However, Erikson fails to clearly support wherein if the remote device (RD, 610, 620, 630) denies access to the resource, detecting another remote device (RD, 610, 620, 630) that provides the resource.

Leon teaches of a system for establishing communication with different wireless devices in order to provide communication with the internet. Leon discloses in column 7 lines 42-67 and column 8 lines 1-22 wherein if access is denied, by not being compatible, then the system will continue to search for a device that is compatible and capable to providing a resource.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Erikson (U.S. Patent Number 6,622,018 B1) to include Leon (U.S. Patent Number 6,680,923 B1) in order to search for another compatible device capable of providing a resource when the resources are denied at a first device.

Regarding **claim 3**, as the combination of Erikson and Leon are made, the combination according to **claim 1**, Erikson further discloses a method for extending one or more capabilities of a PCS (100) comprising:

- wherein using the resource to process the data transferred from the said PCS (100) is controlled by said PCS (100). See column 8 lines 58-64.

Regarding **claim 4**, as the combination of Erikson and Leon are made, the combination according to **claim 1**, Erikson further discloses a method comprising:

- sending characterization information, which reads on claimed "interface description," to said PCS (100), to the said RD. See column 8 lines 50-60;
- said PCS (100) constructing and displaying an icon, which reads on claimed "control interface," from said interface description. See column 9 lines 10-24;
- transferring user interaction with said control interface to said RD (610, 620, 630). See column 8 lines 56-64 and column 9 lines 25-40, and
- interpreting the user interaction based on said selected resource. See column 9 lines 34-40;
  - wherein said PCS (100) operating said RD (610, 620, 630) based on said i.e. use of the stylus (column 2 lines 32-36), and
  - whereby new resources can be added or existing resources can be modified without requiring modifications on said RD (610, 620, 630). See column 10 lines 48-64 and column 11 lines 33-49.

Regarding **claim 5**, as the combination of Erikson and Leon are made, the combination according to **claim 1**, Erikson further discloses in a Link Management Protocol (LMP) utilized to report information, as disclosed in column 7 lines 56-63. Said information is used by the said PCS (100) to execute a command, i.e. on/off, of the said remote device.

2. **Claims 22-23 and 25-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta (U.S. Publication Number 2001/0029531 A1) in view of Leon (U.S. Patent Number 6,680,923 B1).

Regarding **claim 22**, Ohta discloses a system for extending one or more capabilities of a portable digital device (11), comprising:

- a client device (14) i.e. computer/workstation or PDA, which reads on claimed "first means," for accessing at least one resource. See paragraph [0037];
- a print server (13) in conjunction with a print stations (12a, 12b, 12c), which reads on claimed "second means," for controlling access to said at least one resource. See paragraph [0037];
- an access point (16), which reads on claimed "third means," for communicating between said print stations (12a, 12b, 12c) and said print server (13). See paragraph [0037];

- wherein said client device (14) uses said access point (16) to determine whether said print server (13) in conjunction with a print stations (12a, 12b, 12c), is capable of providing a selected one of said at least one resource to said client device (14). See paragraph [0055-0056];
- wherein said client device (14) uses said access point (16) to request said selected resource from said print server (13) in conjunction with a print stations (12a, 12b, 12c)(see paragraph [0037]), said print server (13) in conjunction with a print stations (12a, 12b, 12c), queuing the request if said selected resource is temporarily unavailable. See paragraph [0037];
  - when said selected resource becomes available to said print server (13) in conjunction with a print stations (12a, 12b, 12c), said print server (13) in conjunction with print stations (12a, 12b, 12c), grants said client device (14) access to said selected resource, and any other queued requests for said selected resource from said client device (14) are ignored. See paragraphs [0037-0038];
- wherein said client device (14) uses said access point (16) to transfer data to said print server (13) in conjunction with a print stations (12a, 12b, 12c) in accordance with said print server (13) in conjunction with a print stations (12a, 12b, 12c) granting said client device (14) access to said selected resource. See paragraph [0037];

- wherein said print server (13) in conjunction with a print stations (12a, 12b, 12c) uses said selected resource to process said data. See paragraph [0037];
- wherein said client device (14) is mobile and capable of independent operation. See paragraph [0003];
- wherein said selected resource is not adequately provided by said independent operation of said client device (14), and whereby said one or more capabilities of said client device (14) is extended through the operation of the selected resource of said print server (13) in conjunction with a print stations (12a, 12b, 12c). See paragraph [0040].
- wherein said RD (610, 620, 630) sending characterization information, which reads on claimed "interface description," to said PCS (100). See column 8 lines 50-60;
- wherein said PCS (100) constructing and displaying an icon, which reads on claimed "control interface," from said interface description. See column 9 lines 10-24;
- wherein said RD (610, 620, 630) interpreting the user interaction based on said selected resource. See column 9 lines 34-40;
- wherein said PCS (100) transferring a processed user interaction with said control interface to said RD (610, 620, 630). See column 8 lines 56-64 and column 9 lines 25-40, and 9.



- wherein said PCS (100) operating said RD (610, 620, 630) based on said i.e. use of the stylus (column 2 lines 32-36), and
- whereby new resources can be added or existing resources can be modified without requiring modifications on said RD (610, 620, 630). See column 10 lines 48-64 and column 11 lines 33-49.

However, Ohta fails to clearly support wherein if the remote device (RD, 610, 620, 630) denies access to the resource, detecting another remote device (RD, 610, 620, 630) that provides the resource.

Leon teaches of a system for establishing communication with different wireless devices in order to provide communication with the internet. Leon discloses in column 7 lines 42-67 and column 8 lines 1-22 wherein if access is denied, by not being compatible, then the system will continue to search for a device that is compatible and capable to providing a resource.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Ohta to include Leon (U.S. Patent Number 6,680,923 B1) in order to search for another compatible device capable of providing a resource when the resources are denied at a first device.

Regarding **claim 23**, as the combination of Ohta and Leon are made, the combination according to **claim 22**, Ohta further discloses wherein the operation of said resource on said data is controlled by said client device (14) using said access point (16). See paragraphs [0037 and 0052]

Regarding **claim 25**, as the combination of Ohta and Leon are made, the combination according to **claim 22**, Ohta further discloses in paragraphs [0037,0051,0066] wherein, said information is specified in a printer driver/description language (PDL), which reads on claimed "markup language."

Regarding **claim 26**, as the combination of Ohta and Leon are made, the combination according to **claim 22**, Ohta further discloses in paragraphs [0039] wherein the request for said resource includes capability information associated with said client device (14), and wherein said capability information is used by said print server (13) in conjunction with a print stations (12a, 12b, 12c) to determine the appropriate interface description to send to said client device (14).

Regarding **claim 27**, as the combination of Ohta and Leon are made, the combination according to **claim 22**, Ohta further discloses in paragraphs [0044-0047] wherein the request for said resource from said client device (14) includes the type of data to be transferred and the size of said data.

Regarding **claims 28 and 29**, as the combination of Ohta and Leon are made, the combination according to **claim 22**, further disclosed by Ohta wherein said data transferred from said consists of a URL. See paragraph [0041].

Regarding **claims 30 and 31**, as the combination of Ohta and Leon are made, the combination according to **claim 22**, further disclosed by Ohta wherein a client device (14), i.e. computer/work station, which reads on claimed "client," is used for communication. The said client device (14) being activated on demand, which reads on claimed "daemon," when a user interacts with the said device. See paragraph [0037].

3. **Claims 6-8, 10-12, 14-15 and 17-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Erikson (U.S. Patent Number 6,622,018 B1) in view of Ohta (U.S. Publication Number 2001/0029531 A1) in further view of Leon (U.S. Patent Number 6,680,923 B1).

Regarding **claims 6 and 11**, Erikson discloses a method for extending a capability of a portable computer system (PCS, 100), which reads on claimed "handheld device," capable of independent operation, the method comprising:

- detecting a plurality of remote device (RD, 610, 620, 630) (column 2 lines 9-11), which reads on claimed "helper device," see FIGURE 6, that provides at least one resource, i.e. television, stereo, etc. See column 1 lines 25-30 and controlling access to the resource;;
- determining the RD (610, 620, 630) the provides a first resource needed to extend the capability of the said PCS (100), i.e. on/off, to the selected resource. See column 8 lines 33-64;

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- said PCS (100) issuing a request for access to the selected first resource to each of the said RD (610, 620, 630). See column 8 lines 50-55;
- transferring data to the first said RD (610, 620, 630) from said PCS (100) in accordance with said RD (610, 620, 630) granting said PCS (100) access to the selected resource. See column 9 lines 25-40 and column 10 lines 1-10;
- said RD (610, 620, 630) using the selected resource to process the transferred data(see column 2 lines 31-40) transferred from the said PCS (100);
  - wherein the selected resource is not adequately provided by said independent operation of said PCS (100). See column 2 lines 17-31, and
  - whereby said one or more capabilities, i.e. use of the stylus (column 2 lines 32-36) of said PCS (100) are extended through the operation of the selected resource of said RD (610, 620, 630). See column 2 lines 41-50.
- said RD (610, 620, 630) sending characterization information, which reads on claimed "interface description," to said PCS (100). See column 8 lines 50-60;
- said PCS (100) constructing and displaying an icon, which reads on claimed "control interface," from said interface description. See column 9 lines 10-24;
- said RD (610, 620, 630) interpreting the user interaction based on said selected resource. See column 9 lines 34-40;
- said PCS (100) transferring a processed user interaction with said control interface to said RD (610, 620, 630). See column 8 lines 56-64 and column 9 lines 25-40, and 9.

- wherein said PCS (100) operating said RD (610, 620, 630) based on said i.e. use of the stylus (column 2 lines 32-36), and
- whereby new resources can be added or existing resources can be modified without requiring modifications on said RD (610, 620, 630). See column 10 lines 48-64 and column 11 lines 33-49.

However, Erekson fails to disclose wherein when the selected resource becomes available to one of said RD (610, 620, 630) having queued the request, said one of said RD (610, 620, 630) granting said PCS (100) access to said resource and ignoring all queued requests for said resource in other said RD (610, 620, 630) having queued the request; additionally, wherein all requests for the selected resource, in other helper devices having queued the request from said handheld device, are ignored.

Ohta teaches of a system where a request is sent to a set of printers, which reads on claimed "helper devices," which is controlled by a printer server. When the selected printer becomes available to the said printer server, request is fulfilled. Therefore, ignoring the previously transmitted requests to the other said printers; thus ignoring the queued requests. See paragraph [0076].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Erekson (U.S. Patent Number 6,622,018 B1) to include Ohta (U.S. Publication Number 2001/0029531 A1) in order to eliminate excess storage of queued information that is to be processed by a said remote device when the said device becomes available.

However, the combination of Erikson and Ohta fails to clearly render sufficient support as to if a communication between the handheld device and the first helper device is broken before the handheld device has completed use of the first resource, detecting another helper device providing the first resource.

Leon teaches in column 8 lines 18-22 wherein if the connection is lost, the auto scanning is returned and to continuously search for another computer or facility capable of offering a resource.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the combination of Erikson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) to include Leon (U.S. Patent Number 6,680,923 B1) in order to search for another compatible device capable of providing a resource when the connection of the devices are lost.

Regarding **claim 7**, as the combination of Erikson, Ohta and Leon are made, the combination according to **claim 6**, Ohta continues to further disclose in paragraph [0076] wherein the communication between said PCS (100) and first said RD (610, 620, 630) of step (e) is broken before said PCS (100) has completed use of the first selected resource, returning to step (a), which is detecting another said RD providing the said first resource.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify combination of Erikson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) to include Leon

(U.S. Patent Number 6,680,923 B1) in order to retransmit a request when it is determined that a failure occurred prior to the completion of the request. This function is applicable to assure the said request is granted and the process complete, regardless of errors that may occur.

Regarding **claims 8 and 12**, as the combination of Erikson, Ohta and Leon are made, the combination according to **claims 6, 11**, Erikson further discloses a method for extending one or more capabilities of a PCS (100) comprising:

- controlling the processing of the data, transferred from the said PCS (100) to the said first RD by the said PCS (100). See column 8 lines 58-64.

Regarding **claims 10 and 21**, as the combination of Erikson, Ohta and Leon are made, the combination according to **claim 6 and 11**, Erikson further teaches of a Link Management Protocol (LMP) utilized to report information, as disclosed in column 7 lines 56-63. Said information is used by the said PCS (100) to execute a command, i.e. on/off, of the said remote device.

Regarding **claim 14**, as the combination of Erikson, Ohta and Leon are made, the combination according to **claim 11**, further discloses by Ohta in paragraphs [0037,0051,0066] wherein, said information is specified in a printer driver/description language (PDL), which reads on claimed "markup language."

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify combination of Erikson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) to include Leon (U.S. Patent Number 6,680,923 B1) in order to provide a means of sending information to a said helper device via a language capable of being traversed over the Internet.

Regarding **claim 15**, as the combination of Erikson, Ohta and Leon are made, the combination according to **claim 11**, further disclosed by Ohta in paragraph [0046], of a disk unit (24), which reads on claimed "storage device," for storing application information, which reads on claimed "service information."

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify combination of Erikson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) to include Leon (U.S. Patent Number 6,680,923 B1) in order to provide a means for storing program information utilized to communicate with the said remote devices.

Regarding **claims 17 and 18**, as the combination of Erikson, Ohta and Leon are made, the combination according to **claim 11**, further disclosed by Ohta wherein said data transferred from said consists of a URL. See paragraph [0041].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combination of Erikson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) to include Leon (U.S. Patent



Number 6,680,923 B1) in order to for the said PCS to have the capability to communicate to a said remote device over the internet via a URL.

Regarding **claims 19 and 20**, as the combination of Erikson, Ohta and Leon are made, the combination according to **claim 11**, further disclosed by Ohta wherein a client device (14), i.e. computer/work station, which reads on claimed "client," is used for communication. The said client device (14) being activated on demand, which reads on claimed "daemon," when a user interacts with the said device. See paragraph [0037].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify combination of Erikson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) to include Leon (U.S. Patent Number 6,680,923 B1) in order to provide a static means of establishing communication with a said remote device via a wired network.

4. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Erikson (U.S. Patent Number 6,622,018 B1, Ohta (U.S. Publication Number 2001/0029531 A1) and Leon (U.S. Patent Number 6,680,923 B1) to further include Mitchell et al. (U.S. Publication Number 2002/0184496 A1).

Regarding **claim 16**, as the combination of Erikson, Ohta and Leon are made, the combination according to **claim 11**, fails to disclose a system comprising an access

database for storing authentication data wherein the control of the said remote device is based on the authentication information.

Mitchell et al discloses in paragraphs [0074 and 0076], of an authentication database containing the profile information of a user. Access is granted to a said device based on the information stored in the said authentication database.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the combination of Erikson, Ohta and Leon to further include Mitchell et al. (U.S. Publication Number 2002/0184496 A1) in order to provide a means of security to limit access of a said PCS (100). Additionally, granting permission to access a said remote device by analyzing the authentication profile stored in the authentication database.

5. **Claim 32** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta (U.S. Publication Number 2001/0029531 A1) and Leon (U.S. Patent Number 6,680,923 B1) in view of Erikson (U.S. Patent Number 6,622,018 B1).

Regarding **claim 32**, as the combination of Ohta and Leon are made, the combination according to **claim 22**, Ohta discloses a system for extending one or more capabilities of a portable digital device (11).

However, the combination fails to disclose wherein a status report is generated of the operation of said resource, which is further processed by a said client device (14) for further execution.

Erekson further discloses in a Link Management Protocol (LMP) utilized to report information, as disclosed in column 7 lines 56-63. Said information is used by the said PCS (100) to execute a command, i.e. on/off, of the said remote device.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the combination of Ohta and Leon to include Erekson (U.S. Patent Number 6,622,018 B1) in order to provide a status report to generated and provided to a said client device (14). After an evaluation of the said report, action is further taken based on information provided by the said report.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RANDY PEACHES whose telephone number is (571) 272-7914. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Randy Peaches/  
Examiner, Art Unit 2617

/Charles N. Appiah/  
Supervisory Patent Examiner, Art Unit 2617